

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2005/003800

A. CLASSIFICATION OF SUBJECT MATTER

INV. F02D13/02 F02D41/40 F02D35/02 F02D35/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

F02D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 266 957 B1 (NOZAWA MASAET ET AL) 31 July 2001 (2001-07-31) column 1, line 46 - column 2, line 49; figure 5	1,7
A	EP 1 167 734 A (NISSAN MOTOR CO., LTD) 2 January 2002 (2002-01-02) paragraphs [0011] - [0013]; figure 1	1,7
A	US 5 293 741 A (KASHIYAMA ET AL) 15 March 1994 (1994-03-15) column 1, line 37 - column 2, line 41; figure 6	1,7
A	US 2002/062800 A1 (SHIMIZU HIROKAZU) 30 May 2002 (2002-05-30) paragraphs [0007] - [0010]; figures 2-4	1,7



Further documents are listed in the continuation of Box C.



See patent family annex.

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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

11 April 2006

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19/04/2006

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 6266957	B1	31-07-2001	DE	19913316 A1	16-12-1999
			JP	3521790 B2	19-04-2004
			JP	11336574 A	07-12-1999
EP 1167734	A	02-01-2002	DE	60114932 D1	22-12-2005
			JP	2002004913 A	09-01-2002
			US	2001056322 A1	27-12-2001
US 5293741	A	15-03-1994	NONE		
US 2002062800	A1	30-05-2002	JP	2002161770 A	07-06-2002